

PG&E Letter DCL-21-060

10 CFR 50.90

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001Docket No. 50-275, OL-DPR-80
Docket No. 50-323, OL-DPR-82
Diablo Canyon Units 1 and 2Response to Request for Additional Information on License Amendment Request
21-03, "Request for Revision to Technical Specification 3.8.1, 'AC Sources –
Operating,' to Support Diesel Fuel Oil Transfer System Component Planned
Maintenance"

- References:
1. PG&E Letter DCL-21-020, "License Amendment Request 21-03, Request for Revision to Technical Specification 3.8.1, 'AC Sources - Operating,' to Support Diesel Fuel Oil Transfer System Component Planned Maintenance," dated March 29, 2021 [ADAMS Accession No. ML21088A437]
 2. NRC Email dated August 3, 2021 [ADAMS Accession No. ML21215A343]

Dear Commissioners and Staff:

In Reference 1, Pacific Gas and Electric Company (PG&E) submitted a License Amendment Request for revision to Technical Specification (TS) 3.8.1, "AC Sources – Operating." In Reference 2, the NRC Staff provided a request for additional information (RAI) via an Email dated August 3, 2021. The Enclosure to this letter provides PG&E's response to the RAI.

Revised proposed marked-up TS, retyped TS, and TS Bases (for information only) are contained in Attachments 1, 2, and 3 of the Enclosure, respectively, and supersede those contained in Reference 1. The revised TS changes do not impact the Significant Hazard Consideration evaluation contained in Reference 1.

This letter does not include any new or revised regulatory commitment (as defined by NEI 99-04).

If you have any questions or require additional information, please contact Mr. James Morris, Regulatory Services Manager, at (805) 545-4609.

I state under penalty of perjury that the foregoing is true and correct.

Executed on Date: September 14, 2021

Sincerely,

A handwritten signature in black ink that reads "Paula Gerfen". The signature is written in a cursive style with a large initial "P".

Paula Gerfen
Site Vice President

kjse/51125145

Enclosure

cc: Diablo Distribution

cc/enc: Ayesha Athar, NRC Acting Senior Resident Inspector

Samson S. Lee, NRR Senior Project Manager

Scott A. Morris, NRC Region IV Administrator

Gonzalo L. Perez, Branch Chief, California Department of Public Health

**Response to Request for Additional Information on
License Amendment Request 21-03,
“Request for Revision to Technical Specification
3.8.1,
‘AC Sources – Operating,’ to Support Diesel Fuel Oil
Transfer System Component Planned Maintenance”**

Background:

By letter dated March 29, 2021 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML21088A437), Pacific Gas and Electric Company (PG&E or the licensee) requested changes to the Technical Specifications (TSs) for the Diablo Canyon Nuclear Power Plant, Units 1 and 2 (Diablo Canyon). The proposed amendments would revise TS 3.8.1, “AC [alternating current] Sources – Operating,” Condition F Completion Time to allow a separate one-time Completion Time of 7 days during the planned maintenance for each diesel fuel oil (DFO) transfer pump (DFOTP) 0-1 and 0-2, with the portable DFOTP (PDFOTP) staged and available. The one-time Completion Time of 7 days for DFOTP 0-1 and 0-2 supports planned maintenance to maintain high reliability of the DFOTPs.

Risk Insights:

Regulatory Bases

Title 10 of the Code of Federal Regulations (10 CFR) Section 50.36, “Technical Specifications,” in part, requires that the technical specifications be derived from the analyses and evaluation included in the safety analysis report, and amendments thereto and includes items in the following categories: (1) safety limits, limiting safety systems settings, and limiting control settings; (2) LCOs; (3) surveillance requirements; (4) design features; (5) administrative controls; (6) decommissioning; (7) initial notifications; and (8) written reports. Paragraph (c)(2)(i) of 10 CFR 50.36 states, in part, that “limiting conditions for operation are the lowest functional capability or performance levels of equipment required for safe operation of the facility. When a limiting condition for operation of a nuclear reactor is not met, the licensee shall shut down the reactor or follow any remedial action permitted by the technical specifications until the condition can be met.”

Paragraph (a)(4) of 10 CFR 50.65 (the Maintenance Rule) requires licensees to assess and manage the increase in risk that may result from proposed maintenance activities, prior to performing these activities. The industry guidance for implementation of the Maintenance Rule is documented in NUMARC 93-01, “Industry Guideline for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants.” Section 11.0 of NUMARC 93-01 provides guidance for

implementation of the requirements in 10 CFR 50.65(a)(4), including guidance regarding Risk Management Actions (RMAs) that should be employed to control the risks associated with proposed maintenance activities. The NRC staff endorsed NUMARC 93-01, Revision 4A, in Regulatory Guide (RG) 1.160 (ADAMS Accession No. ML18220B281) with additional provisions and clarifications.

RAI APLA-01 – Protected Trains

Section 3 of the License Amendment Request (LAR) enclosure outlines the specific RMAs proposed to mitigate the increased risk associated with the DFOTP maintenance activities. These include protection of the offsite AC power circuits and the Turbine-Driven Auxiliary Feedwater (TDAFW) pump train and supporting equipment on both units. However, the LAR enclosure does not explicitly state that the in-service DFOTP (i.e., the DFOTP that is not undergoing maintenance), nor its supporting equipment, will be protected during the maintenance evolution on the out-of-service (OOS) DFOTP. State whether the in-service DFOTP and its supporting equipment (e.g., motor controls, local and remote control switches and interlocks) will be protected during maintenance on the OOS DFOTP.

PG&E Response:

The RMA for protection of the in-service DFOTP was implied by the LAR Section 3 sentences in the “Risk Insights” subsection that stated: “Taking one train of the DFOTP system out for maintenance at a time has been assessed using the Diablo Canyon Power Plant (DCPP) Probabilistic Risk Assessment (PRA) model, which includes internal events, internal flooding, fire, and seismic. This assessment assumes that during the extended Completion Time: (1) the other train of the DFOTP system is available...”. Existing Operations processes and procedures for protecting plant equipment require protection of the operable DFOTP train when one DFOTP is inoperable. The required posting to protect DFOTP components per process consists of DFOTP control switches, normal and alternate power supply breakers, and the local power disconnect for the DFOTP that remains operable. The DFOTPs are each located in an individual secured vault which provides further protection.

RAI APLA-02 – Discretionary Testing and Maintenance Activities

Section 3 of the LAR enclosure outlines the specific RMAs proposed to mitigate the increased risk associated with the DFOTP maintenance activities. No information is provided regarding the administrative controls that may be used to manage and limit discretionary testing and maintenance on risk significant Structures, Systems and Components (SSCs) during the proposed DFOTP maintenance windows. State whether additional controls or requirements will be applied to discretionary testing and maintenance on risk-significant SSCs (e.g., direct-current (DC) power supplies) during the proposed DFOTP maintenance windows.

PG&E Response:

DCPP has existing administrative controls that manage and limit discretionary testing and maintenance on risk significant SSCs during planned maintenance windows. In accordance with the existing work management process, the Operations Daily Planning group will review scheduled activities during the work planning process to ensure no discretionary testing or maintenance of relevant risk significant SSCs will occur during the proposed DFOTP maintenance windows. Scheduled testing and maintenance activities are assessed for the work week for PRA impact and are ensured not to exceed the risk significance criteria.

In addition, established DCPP processes and procedures for assessment of integrated risk and work management require a risk evaluation be performed prior to any work on equipment that is posted as protected. Work on protected equipment is rarely allowed, requires additional RMAs, and is typically emergent in nature.

RAI APLA-03 – Testing and Maintenance Assumptions

Section 3 of the LAR enclosure provides an overview of the Probabilistic Risk Analyses (PRA) performed to support the proposed completion time extension. This information includes the total exposure time and a general conclusion regarding the results of the analyses indicating that the risk significant criteria in RG 1.174 (ADAMS Accession No. ML17317A256) were not exceeded when the analyses were performed.

- a. State what assumptions were used in the PRA relative to testing and maintenance activities (e.g., suspension of discretionary testing and maintenance) when the risk significance of the proposed change was evaluated.*

PG&E Response:

No specific plant configuration was assumed in the PRA relative to testing and maintenance activities, which might be scheduled at the time of DFOTP maintenance. As stated in the response to RAI APLA-02, established processes and procedures for assessment of integrated risk and work management require a risk evaluation be performed prior to any work on equipment that is posted as protected. Work on protected equipment is rarely allowed, requires additional risk mitigation actions, and is typically emergent in nature. Additionally, scheduled testing and maintenance activities are assessed for the work week for PRA impact and are ensured not to exceed the risk significance criteria.

The PRA model used for the evaluation of the 7-day DFO transfer system Completion Time was the average maintenance model. The normal maintenance and testing variables are still applied in the model. Other assumptions applied during the 7-day Completion Time are: (1) the other train of the DFO transfer

system is available; (2) the PDFOTP and necessary supporting equipment is staged prior to and while one of the normal DFO transfer system trains is out of service for the planned maintenance; and (3) maintenance and testing on protected equipment listed in the LAR will be restricted.

- b. State whether these assumptions were used to inform RMAs related to discretionary testing and maintenance activities during the extended completion time (see APLA RAI 02).*

PG&E Response:

The assumptions used in the PRA model to evaluate the 7-day DFO transfer system Completion Time as described in the response to RAI APLA-03.a were used to inform the RMAs. The RMAs will be implemented prior to entering the TS 3.8.1 Condition F and remain until exiting from the TS condition.

RAI APLA-04 – Human Reliability Analysis

Staging the PDFOTP during the planned maintenance activities on the permanently installed DFOTPs has been proposed as one of the RMAs supporting the proposed completion time extension. Section 3 of the LAR enclosure indicates that human actions for aligning the PDFOTP and manipulating the valves supporting PDFOTP operation are proceduralized and included in the DCPP PRA model. As part of the broader Human Reliability Analysis (HRA) for these actions:

- a. Discuss HRA performance shaping factors and timing that were used in the PRA model for evaluating alignment of the PDFOTP.*

PG&E Response:

The PDFOTP was assumed to be staged during the proposed 7-day DFO transfer system Completion Time for each DFOTP. The performance shaping factors used in the PRA human error probability (HEP) model for the alignment of the PDFOTP include special requirements (tools and parts), environment (lighting, heat, radiation, and atmosphere), equipment accessibility, and stress levels. The execution complexity was assumed to be complex. The table below provides details of the performance shaping factors.

The primary goal for the decision to have the PDFOTP staged (as opposed to leaving at its normal storage location in the secured storage vault) was to reduce the required workload, timing, and stress that would occur while removing the pump from the storage vault, setting up the pump, and setting up the emergency DFO transfer hoses to support connection to the DFO system during an emergent need. With the PDFOTP staged, some of the equipment accessibility and stress performance shaping factors assumed in the table below will not apply, such as

opening the secured storage vault, setting up the PDFOTP in proximity of the DFO storage tanks, and obtaining the emergency DFO oil transfer hoses from the DFO storage cabinet. Therefore, the performance shaping factors used in the PRA model are conservative for the evaluation of the extended Completion Time.

PDFOTP Execution Performance Shaping Factors		
Special Requirements	Tools	Required
		Adequate
		Available
	Parts	Required
		Adequate
		Available
Environment	Lighting	Emergency
	Heat	Normal
	Radiation	Background
	Atmosphere	Normal
Equipment Accessibility	West of Turbine Building	With Difficulty
Stress	High	
	<i>Plant Response As Expected:</i>	Yes
	<i>Workload:</i>	High
	<i>Performance Shaping Factors:</i>	Negative
Notes		
High workload as this HFE occurs in multiple scenarios.		
Environment (e.g., lighting, heat, radiation) under which the operator is working: Normal control room and diesel generator building environment. DFO storage tanks and piping west of turbine building.		
Accessibility of the equipment requiring manipulation: DFO storage tanks and piping west of turbine building are accessible with difficulty.		
Tools Necessity, adequacy, and availability of special tools, parts, clothing, etc.: Requires security to unlock a pump vault hatch or PDFOTP Suction hatch. Requires PDFOTP and dedicated emergency DFO transfer hoses located in DFO storage cabinet.		
Execution Complexity	Complex	

The total time available for aligning the PDFOTP for the PRA model is approximately 4 hours, which includes the time to deplete the available fuel in the day tank and time to core damage once the diesel generators (DGs) run out of fuel and AC power is lost.

The total time required for recognizing the low day tank level condition and completing the alignment of the PDFOTP is approximately 1 hour. With alignment of the PDFOTP in 1 hour, there is more than 2 hours that remain for any recovery actions if they were needed.

- b. State whether Job Performance Measures (JPMs) are used to formally assess operator proficiency with these tasks.*

PG&E Response:

No, JPMs are not used to formally assess operator proficiency with these tasks.

- c. If JPMs are not applicable to these tasks, state the type of training activities (e.g., classroom, on-the-job training) that are used to ensure operator proficiency for these tasks and further ensure reliable deployment of the PDFOTP.*

PG&E Response:

Existing Operations procedures contain guidance to place the PDFOTP in service and manually operate the DFO level control valves in the event of a DFOTP equipment malfunction. Operators are assessed in the performance of these tasks during their qualification process in the form of on-the job-training and task performance evaluations (TPEs). Additionally, there is a high degree of proficiency with the operation of the PDFOTP since it is tested on a quarterly frequency.

- d. Discuss any sensitivity analyses that were performed to bound uncertainty.*

PG&E Response:

Sensitivity analysis was not originally performed to support the LAR. This is because of the significant margin of the results, and that the HEP model used included conservatism in its development. The PDFOTP will be staged prior to and during the DFOTP maintenance window. The staging of the PDFOTP on location, while in the proposed TS 3.8.1 Condition F 7-day Completion Time, will be communicated by a Shift Order, Operations Turnover Notes, and documented in the Control Room on the Abnormal Status Boards for both DCPD units.

In support of response to this question, a PRA sensitivity analysis was performed using the 95th percentile HEP model value of the human action for aligning the PDFOTP instead of the mean value. The sensitivity results also show significant margin with respect to the risk significance criteria of 1.0E-06 for incremental conditional core damage probability and 1.0E-07 for incremental conditional large early release probability of RG 1.177, Revision 1, "An Approach for Plant-Specific, Risk-Informed Decisionmaking: Technical Specifications," dated May 2011.

Human Factor Engineering:

Regulatory Bases

10 CFR, Part 50, Appendix B, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants," Criterion V, "Instructions, Procedures, and Drawings" requires, in part, that activities affecting quality shall be prescribed by documented instructions, procedures, or drawings, of a type appropriate to the circumstances.

NUREG-0800, "Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants: [Light-Water Reactor] LWR Edition," Chapter 18, "Human Factors Engineering," Revision 3 (ADAMS Accession No. ML16125A114), provides the regulatory guidance for human factors engineering (HFE) considerations for applicants. SRP Chapter 18 indicates that, for requests associated with changes to important human actions, applicable acceptance criteria are contained in NUREG 1764. NUREG-1764 provides guidance for determining the level of HFE review required for such requests and the HFE criteria to be considered while completing the staff's evaluation.

For a non-risk-informed LAR submittal, NUREG-1764 includes instructions for NRC staff to take into consideration certain qualitative factors that can affect the necessary level of HFE review for the submittal. Among the qualitative factors to be considered are the following:

- Change in Performance Context: Has the requested change created, in some way, a new context for task performance?*
- Change in Procedures: Has the requested change significantly changed the procedures that personnel use to perform the task?*
- Change in Training: Has the requested change significantly modified the training, or is the task not addressed in training?*

The NRC Staff have determined that the risk-mitigating action of staging the PDFOTP, which is to be incorporated as a condition within the requested change to Technical Specification 3.8.1, constitutes a change to an operator action relied upon to restore system operability in the event of a failure of the remaining permanently-installed transfer pump. Specifically, the staging of the PDFOTP at a location that is different from its usual location will introduce a change in the performance context for the task.

RAI IOLB-01

The NRC Staff has considered the possibility of an operator being unaware of the change in PDFOTP location, when staged. Without adequate instruction indicating

that the pump has been staged, an operator could potentially experience a challenge if they had to spend unanticipated time identifying that the pump was not in the expected location (in accordance with established training/procedures), and thereafter having to track down its staged location. This is especially a potential concern when considering that fact that, as discussed in Section 2 of the submittal, operators only have a nominal one-hour time allotment to perform the critical task of restoring the system to an operable state.

In Section 2 of the License Amendment Request, the licensee states, "The use of the PDFOTP is proceduralized using [Diablo Canyon] Operating Procedure OP J-6C:V, 'Diesel Fuel Oil Transfer System - Use of Portable FOTP and DFO Day Tank LCVs.'" However, the submittal does not include information regarding how this procedure will be impacted by the PDFOTP being staged in a different location. Specifically, the submittal does not indicate whether instructions in the procedure are reliant on the pump being in its usually-stored location, nor does the submittal indicate whether a change to the procedure or a separate set of instructions will be necessary to account for the relocation of the pump.

Please provide information regarding how the staging of the PDFOTP will be controlled by documented instructions, procedures, and/or drawings, of a type appropriate to the circumstances. (For example, will a temporary procedure or work order instructions be used to indicate the location of the pump? Will the staging of the pump be addressed through pre-job and/or shift-turnover briefs during the period of time while the station is in the extended LCO? Will any additional training be necessary to ensure operators can complete tasks as intended? If so, please describe.)

PG&E Response:

The staging of the PDFOTP on location while using the proposed TS 3.8.1 Condition F 7-day Completion Time will be communicated by a Shift Order, Operations Turnover Notes, and documented in the Control Room on the Abnormal Status Boards for both Units. The staging of the PDFOTP does not require additional training or procedure guidance because existing Operations procedures contain guidance to place the PDFOTP in service and manually operate the DFO level control valves in the event of a DFOTP equipment malfunction and the location of staging is in proximity of both DFO Storage Tanks. This is the location that Operations has been trained to stage the pump during postulated design basis scenarios that require PDFOTP use, and is the staging location used during routine quarterly testing of the PDFOTP.

Mechanical Engineering:

Regulatory Bases

General Design Criterion (GDC)-17, "Electric power systems," of Appendix A, "General Design Criteria for Nuclear Power Plants," to 10 CFR Part 50, requires, in part, that nuclear power plants have onsite and offsite electric power systems to permit the functioning of SSCs that are important to safety.

RAI EMIB-01

Section 2, "DETAILED DESCRIPTION", page 3 of the submittal states that each DFOTP delivers more than 55 gallons per minute at a discharge pressure of approximately 50 pounds per square inch gauge, and one pump is more than adequate to supply the six diesel generators (DGs) of Unit 1 and Unit 2 operating at full load. It is also stated that the PDFOTP "supplies the required flow." Provide the flow rate and discharge pressure for the PDFOTP, the type of pump, and whether it is adequate to supply the six DGs of Unit 1 and Unit 2 operating at full load. Describe how the PDFOTP is connected to the fuel oil transfer system piping before the repairs to the fuel oil transfer pumps begin, or if it is staged nearby and ready to be connected to the piping if required.

PG&E Response:

The PDFOTP is a positive displacement gear type pump that delivers approximately 50 gpm at a discharge pressure of 105 pounds per square inch gauge (psig) as has been determined by routine surveillance testing. Each DG consumes less than 4 gpm of diesel fuel at peak accident load levels, for a total of 24 gpm for all 6 DGs at once, which is within the PDFOTP capabilities. The PDFOTP and necessary supporting equipment will be staged prior to and while one of the normal DFO transfer system trains is out of service for the planned maintenance. The PDFOTP will be staged in accordance with the routine quarterly surveillance procedure such that it is as close as practical to the DFO Storage Tank suction connection.

RAI EMIB-02

Section 2, "DETAILED DESCRIPTION", page 6 of the submittal states that the FLEX PDFOTP has a 40 gallon per minute (gpm) capacity. State whether this flow rate is adequate to supply the six DGs of Unit 1 and Unit 2 operating at full load. Also provide the pump discharge pressure and state whether it is adequate. During the repairs to the fuel oil transfer pumps, if this pump is required to operate, state what type of power will be provided to the pump (i.e., 1E, non-1E).

PG&E Response:

The FLEX PDFOTP is a centrifugal pump that delivers 40 gpm at a discharge pressure of 35.5 psig under design basis conditions requiring 20 feet of suction lift. Each DG consumes less than 4 gpm of diesel fuel at peak accident load levels, for a total of 24 gpm for all 6 DGs at once, which is within the FLEX PDFOTP capabilities. The FLEX PDFOTP flow rate and discharge pressure is adequate to supply the six DGs of Unit 1 and Unit 2 operating at full load. The FLEX PDFOTP is powered by its own non-1E portable diesel engine.

Electrical Engineering:

Regulatory Bases

Diablo Canyon final safety analysis report (FSAR) Section 3.1.5.6, Criterion 24, 1967 - Emergency Power for Protection Systems (Category B) states:

In the event of loss of all offsite power, sufficient alternate sources of power shall be provided to permit the required functioning of the protection systems.

Discussion: The facility is supplied with normal and standby emergency power to provide for the required functioning of the protection systems.

In the event of loss of normal power, emergency AC power is supplied by six diesel generators, as described in Chapter 8. Only four diesels are required to supply the power requirements with one unit in an accident situation and to bring the other to the shutdown condition from full power. The instrumentation and controls portions of the protection systems are supplied initially from the station batteries and subsequently from the emergency diesel generators. A single failure of any one component will not prevent the required functioning of protection systems.

RAI EEEB-01

In the license amendment request (LAR), the licensee proposed to revise TS 3.8.1 to allow a one-time extension of CT for maintenance of each of the two DFOTPs. The proposed amendment includes notes that would require a staged PDFOTP during the required DFOTP maintenance.

Please clarify the type of the proposed portable pump, pump capacity, estimate of time to start pumping, and provide a brief description of how the pump will be staged sufficient to support the proposed completion time extension.

PG&E Response:

The PDFOTP is a positive displacement gear type pump that delivers approximately 50 gpm at a discharge pressure of 105 psig as has been determined by the routine surveillance procedure. The expected time to start pumping with PDFOTP staged on location is less than 1 hour. PDFOTP will be staged in accordance with the routine quarterly surveillance procedure such that it is as close as practical to the DFO Storage Tank suction connection. The PDFOTP is powered by its own non-1E portable diesel engine.

Technical Specifications:

Regulatory Bases

The regulation in 10 CFR 50.36(c)(2)(i) states in part:

Limiting conditions for operation are the lowest functional capability or performance levels of equipment required for safe operation of the facility. When a limiting condition for operation of a nuclear reactor is not met, the licensee shall shut down the reactor or follow any remedial action permitted by the technical specifications until the condition can be met.

RAI STSB-01

The NRC staff reviewed the licensee's LAR for a one-time CT extension from 72 hours to 7 days during the planned maintenance for each DFOTP. The NRC staff noted that the Diablo Canyon marked-up TS pages (Attachment 1 to the LAR) are inconsistent with the recommended style of Standard Technical Specifications, and the proposed changes appear to have potential for misinterpretation by licensee operators and NRC inspectors. Please clarify the proposed Diablo Canyon TS 3.8.1 marked-up pages to have an appropriate amount of detail and include the following elements:

- a. An expiration date for using the extended CT for each DFO transfer system pump;*

PG&E Response:

The maintenance to replace each DFOTP motor is planned to be performed during 2022. Therefore, the words "in 2022" are added to the proposed TS 3.8.1 Condition F Completion Time Note.

- b. One-time use of the CT extension to 7 days for each applicable DFOTP, regardless of whether maintenance is completed during the attempt;*

PG&E Response:

PG&E's intent through the use of the word "one-time" in the proposed TS 3.8.1 Condition F Completion Time was that it limited the use of the 7-day Completion Time to once only for each DFOTP. In order to prevent any potential misinterpretation on how many times the proposed Completion Time can be used for each DFOTP, the words "use only" have been added after the word "one-time" in the proposed TS 3.8.1 Condition F Completion Time Note.

- c. *Section 2.8.2, "Temporary Changes," of the Writer's Guide for Plant-Specific Improved Technical Specifications states, "Do not use footnotes for temporary changes, except as allowed for figures and tables." The licensee is requested to determine if including a note instead of a footnote in the CT would provide additional consistency.*

PG&E Response:

The format of the proposed Completion Time Note has been revised to be located at the top of the Completion Time column, instead of at the bottom of the TS page, to be consistent with the guidance included in Section 2.8.2, "Temporary Changes," of the Writer's Guide for Plant-Specific Improved Technical Specifications (Technical Specifications Task Force Document TSTF-GG-05-01, Revision 1, dated August 2010). To accommodate the addition of the Completion Time Note to the Completion Time column, the current TS Condition H is moved (unchanged) to the next TS page. The new proposed TS 3.8.1 Condition F Completion Time Note is as follows:

-----NOTE-----

A separate one-time
use only Completion
Time of 7 days is
allowed during
planned maintenance
of each DFO transfer
system pump 0-1 and
0-2 in 2022 with the
Portable DFO transfer
pump staged and
available.

The revised proposed TS 3.8.1 Condition F change is noted on the marked-up TS page provided in Attachment 1 to this Enclosure. The revised proposed retyped TS is provided in Attachment 2 to this Enclosure. Since the proposed additional TS changes limit the use of the proposed 7-day Completion Time, and do not expand its

use, the Significant Hazard Consideration evaluation contained in the LAR continues to apply to the revised proposed TS changes.

The TS 3.8.1 Bases are revised to incorporate the changes in the new proposed TS 3.8.1 Condition F Completion Time Note and are as follows:

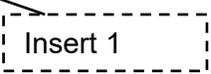
The 72-hour Completion Time is modified by a Note that allows a one-time use only Completion Time of 7 days during the planned maintenance of each DFO transfer system pump 0-1 and 0-2 during the year 2022, with the portable DFO transfer pump staged and available. The one-time Completion Time of 7 days can only be used once for separate maintenance of each DFO transfer system pump 0-1 and 0-2. The one-time Completion Time of 7 days is reasonable considering the additional requirement to have the portable DFO transfer pump staged and available during the one-time Completion Time for each DFO transfer system supply train to offset additional risk that is incurred, based on the risk insights obtained from the DCPD Probabilistic Risk Assessment model.

The TS Bases changes for TS 3.8.1 Condition F are included in Attachment 3 to this Enclosure, for information only, and will be implemented in accordance with the DCPD TS Bases Control Program.

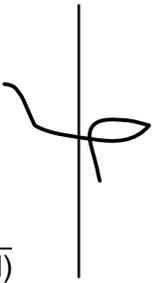
The revised proposed marked-up TS, retyped TS, and TS Bases changes supersede those contained in the LAR.

Proposed Technical Specification Changes (marked-up)

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
C. Two required offsite circuits inoperable.	C.1 Declare required feature(s) inoperable when its redundant required feature(s) is inoperable.	12 hours from discovery of Condition C concurrent with inoperability of redundant required features.
	<u>AND</u> C.2 Restore one required offsite circuit to OPERABLE status.	24 hours
D. One required offsite circuit inoperable. <u>AND</u> One DG inoperable.	D.1 Restore required offsite circuit to OPERABLE status.	12 hours
	<u>OR</u> D.2 Restore DG to OPERABLE status.	12 hours
E. Two or more DGs inoperable.	E.1 Ensure at least two DGs are OPERABLE.	2 hours
F. One supply train of the DFO transfer system inoperable.	F.1 Restore the DFO transfer system to OPERABLE status.	72 hours 
G. Two supply trains of the DFO transfer system inoperable.	G.1 Restore one train of the DFO transfer system to OPERABLE status.	1 hour
H. Required Action and associated Completion Time of Condition A, B, C, D, E, F or G not met.	H.1 Be in MODE 3.	6 hours
	<u>AND</u> H.2 -----NOTE----- LCO 3.0.4.a is not applicable when entering MODE 4. ----- Be in MODE 4.	12 hours

Move Condition H to next page



(continued)

Technical Specification Inserts

TS Insert 1

-----NOTE-----

A separate one-time use only Completion Time of 7 days is allowed during planned maintenance of each DFO transfer system pump 0-1 and 0-2 in 2022 with the Portable DFO transfer pump staged and available.

Revised Technical Specification Page(s)

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
C. Two required offsite circuits inoperable.	C.1 Declare required feature(s) inoperable when its redundant required feature(s) is inoperable.	12 hours from discovery of Condition C concurrent with inoperability of redundant required features.
	<u>AND</u> C.2 Restore one required offsite circuit to OPERABLE status.	24 hours
D. One required offsite circuit inoperable. <u>AND</u> One DG inoperable.	D.1 Restore required offsite circuit to OPERABLE status.	12 hours
	<u>OR</u> D.2 Restore DG to OPERABLE status.	12 hours
E. Two or more DGs inoperable.	E.1 Ensure at least two DGs are OPERABLE.	2 hours
F. One supply train of the DFO transfer system inoperable.	F.1 Restore the DFO transfer system to OPERABLE status.	-----NOTE----- A separate one-time use only Completion Time of 7 days is allowed during planned maintenance of each DFO transfer system pump 0-1 and 0-2 in 2022 with the portable DFO transfer pump staged and available. ----- 72 hours
G. Two supply trains of the DFO transfer system inoperable.	G.1 Restore one train of the DFO transfer system to OPERABLE status.	1 hour

(continued)

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
H. Required Action and associated Completion Time of Condition A, B, C, D, E, F or G not met.	H.1 Be in MODE 3. <u>AND</u> H.2 -----NOTE----- LCO 3.0.4.a is not applicable when entering MODE 4. ----- Be in MODE 4.	6 hours 12 hours
I. Two or more DGs inoperable. <u>AND</u> One or more required offsite circuits inoperable.	I.1 Enter LCO 3.0.3.	Immediately
J. One or more DGs inoperable. <u>AND</u> Two required offsite circuits inoperable.	J.1 Enter LCO 3.0.3.	Immediately

Technical Specification Bases Change(s)
(For information only)

(continued)

BASES

E.1

With two or more DGs inoperable, the remaining onsite AC sources are inadequate. Thus, with an assumed loss of offsite electrical power, insufficient standby AC sources are available to power the minimum required ESF functions. Since the offsite electrical power system may be the only source of AC power for this level of degradation, the risk associated with continued operation for a very short time could be less than that associated with an immediate controlled shutdown (the immediate shutdown could cause grid instability, which could result in a total loss of AC power). Since any inadvertent generator trip could also result in a total loss of offsite AC power, the time allowed for continued operation is severely restricted. The intent here is to avoid the risk associated with an immediate controlled shutdown and to minimize the risk associated with this level of degradation.

According to Reference 6, with two or more DGS inoperable, operation may continue for a period that should not exceed 2 hours.

F.1

Condition F corresponds to a level of degradation in which one train of the DFO transfer system is inoperable. The onsite AC electrical power systems are redundant and available to support ESF loads. However, one subsystem required for the onsite AC electrical system operability has lost its redundancy (DFO supply to the DGs).

The 72 hour Completion Time takes into account the capacity and capability of the remaining AC sources, a reasonable time for repairs, and the low probability of a DBA occurring during this period.

The 72 hour Completion Time is modified by a Note that allows a one-time use only Completion Time of 7 days during the planned maintenance of each DFO transfer system pump 0-1 and 0-2 during the year 2022 with the portable DFO transfer pump staged and available. The one-time Completion Time of 7 days can only be used once for separate maintenance of each DFO transfer system pump 0-1 and 0-2. The one-time Completion Time of 7 days is reasonable considering the additional requirement to have the portable DFO transfer pump staged and available during the one-time Completion Time for each DFO transfer system supply train to offset additional risk that is incurred, based on the risk insights obtained from the DCP Probabilistic Risk Assessment model.